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IN THE ABSTRACT

ABSTRACT OF THE DISCLOSURE

A process for separating hydrocarbon isomers in gas phase on molecular sieves, including feeding mixtures of hydrocarbon isomers to a primary adsorption column configured to adsorb isomers with a greater selectivity towards the molecular sieves, feeding effluent from the primary adsorption column to a secondary adsorption column configured to adsorb remaining isomers with a greater selectivity towards the molecular sieves and discharge a stream containing isomers with a lower selectivity towards the molecular sieves, feeding desorbing agent to a desorption column configured to discharge a stream containing isomers with a greater selectivity towards the molecular sieves and the desorbing agent, feeding the stream from the secondary adsorption column to a distillation unit configured to recover the desorbing agent for recycling to the desorption column, feeding the stream from the desorption column to another distillation unit configured to recover the desorbing agent for recycling to the desorption column.